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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/695,169 10/24/00 DORN

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EXAMINER

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GONZALEZ, J	
ART UNIT	PAPER NUMBER

2834
DATE MAILED:

06/01/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/695,169

Applicant(s)

DORN, DOUGLAS W.

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2000 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: .

DETAILED ACTION

Drawings

✓ 1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second calculation element, first calculation element, intermediate signal generation and control signal generation and the alternator disclosed in claim 1, the wye configuration and delta configuration disclosed in claim 4, the first and second comparing element disclosed in claim 5, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-14 and 16-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, applicant discloses a first and second calculation element, an intermediate signal and a control signal. Where would these elements be in figure 5? Is it the PI controllers? Feedback? Differencing junctions? In claim 3, applicant discloses that first element calculates three RMS voltages, but figure 5 shows only two voltages going into the first element 502. In claim 4, applicant discloses that the alternator can be configured in a single-phase configuration, dog-leg configuration, zig-zag and double delta configuration.

Is it possible to show each configuration showing the connections from the alternator to the configuration and to the circuit? Wouldn't the different configurations affect the power deliver to the control system? Is the alternator functioning in a three-phase configuration? If so, how can it switch to a single-phase configuration?

In claim 7, applicant discloses that the system can function with a proportional-integral, proportional controller or with a proportional-integral-differential controller. How would the system adjust itself in order to be able to function with different controllers? Would they have the same output? Would each controller satisfied the 10ms and 100 ms feedback time signal? Would changing the controllers affect the real time of the system?

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-11, 13-16 and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Rozman et al.

Rozman et al discloses a system for providing control to an alternator comprising a first calculation element 342, a second calculation element 346, an intermediate signal 344, a control signal generation element 356, a wye configuration (see figure 14), a first comparing element (POSITION) and second comparing element 354 (SPEED). Also

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the system comprises a Differencing element 374 and a PI controller 386 and an outer and inner loop (see figure 14).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rozman et al in view of ordinary skill in the art.

Rozman et al discloses a system for providing control to an alternator comprising a first calculation element 342, a second calculation element 346, an intermediate signal 344, a control signal generation element 356, a wye configuration (see figure 14), a first comparing element (POSITION) and second comparing element 354 (SPEED). Also the system comprises a Differencing element 374 and a PI controller 386 and an outer and inner loop (see figure 14).

Rozman et al discloses the claim invention except for the constant of 1200 and the feedback signal to be calculated every 10ms or 100ms.

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to find the feedback times and the constant (120V x 10), since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

May 30, 2001


NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
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